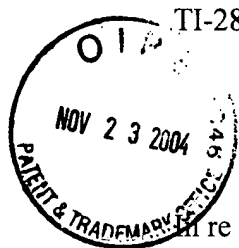


ZWAF



TI-28458

BEFORE THE BOARD OF PATENT APPEALS AND
INTERFERENCES

In re application of:
Ryan Middleton

Serial No. 09/639,574

Title: System for Nonlinear Viewing of Television Show Segments

Filed: August 14, 2000

Examiner: Natnael, Paulos M.
Art Unit: 2178

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear sir:

MAILING CERTIFICATE UNDER 37 C.F.R. §1.8(A)
I hereby certify that the above correspondence is being deposited with the
U.S. Postal Service as First Class Mail in an envelope addressed to:
Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Robert L. Troike
Robert L. Troike, Reg. No. 24,183

11/19/04
Date

APPEAL BRIEF

As required by 37 C.F.R. 192 (c), this brief, filed in triplicate, contains the following items under appropriate headings and in the order there indicated. Please charge the cost of this brief and any other costs associated with this brief to deposit account no.20-0668 of Texas Instruments Incorporated. An oral hearing is not requested.

REAL PARTY IN INTEREST

The party of interest is Texas Instruments Incorporated of Dallas Texas, a Delaware corporation.

RELATED APPEALS AND INTERFERENCES

There are no other related appeals or interferences.

STATUS OF CLAIMS

Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

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Claims 1, 4, 6-11 are rejected under 35 U.S.C. 102 (e) as being anticipated by Rosengren et al., U.S. Patent No. 6,041,068 hereinafter Rosengren.

Claims 2 and 12 are rejected under 35 U.S.C. 102(a) as being unpatentable over Rosengren in view of Yuen et al U.S. Patent No. 6,452,640; hereinafter Yuen.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosengren in view of Dougherty et al. U.S. Patent No. 5,737,025; hereinafter Dougherty.

Claim 5 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Rosengren.

STATUS OF AMENDMENTS

An amendment after final was filed on August 9, 2004. It was not entered.

SUMMARY OF INVENTION

In the background of applicant's invention, applicant discussed that television broadcasting includes extensive editing of program material, particularly news broadcasting to fit the programming time constraints. It stated that it was highly desirable to enable the viewer to see this material. Video On Demand (VOD) system require significant dedicated amounts of television and other media content to send the selected segments. Further broadcasters are faced with the high cost of installing High Definition Television Broadcast equipment with an unknown and so far limited number of customers to make it worth while to broadcast high definition television. It is therefore desirable to provide other ways of attracting more viewers. Applicant's claimed invention provides a solution to these problems by broadcasting uncompressed broadcast television signals and separate ancillary uncompressed broadcast television signals with separate television show segment related to the main television signals. For example

source 1 and source 2 in Figure 4. Applicants claim 1 describes a system for nonlinear viewing of television segments that includes a television broadcast transmitter with a device for generating and transmitting main uncompressed broadcast television signals and separate ancillary uncompressed broadcast television signals with separate television show segment related to said main television signals (modulation 103 and transmitter 105 with switch in 2 standard TV bands in Fig. 4); a television receiver system for receiving said main television signals (demodulator 110 and decoder 111 in Fig. 4) and for receiving and storing in a cache memory the uncompressed broadcast ancillary television signals with the separate television show segment (demodulator 114 and decoder and memory 116, and a selector 118 in Fig. 4) at the television receiver for providing either the uncompressed broadcast main television signals or the uncompressed broadcast ancillary television signals with the separate television show segment to a display of said television receiver. This is also shown in Fig. 1 where the primary source is 11 and the ancillary source is 19 and sent using a VBI channel and the demodulator 23 and decoder 25 receive the main signals and the ancillary signals are stored in storage 26.

According to claim 2 the claim describes the system of Claim 1 including a device for generating an icon on a television receiver display (Icon Gen 28 in Fig. 1)indicating the presence of the stored uncompressed broadcast ancillary signals and a device at the television receiver for accessing said store signal in the cache memory using said icon.

According to claim 3, applicants claim the system of Claim 1 wherein the uncompressed broadcast ancillary signal is broadcasted in the vertical blanking interval of the main uncompressed broadcast signal and the receiver receives the uncompressed

broadcast ancillary signal during the vertical blanking interval. (See primary source 11 and ancillary source 19 in Fig. 1)

According to claim 4, claim 4 describes the system of claim 1 wherein the television signals are transmitted over a digital television channel subdivided into several subchannels of multiplexed signals (Source 1- N and multiplexer 51 of Fig.6) and wherein one of said subchannels contains said main uncompressed broadcast television signals and the other subchannels provide ancillary uncompressed broadcast signals.

According to claim 5, claim 5 describes the system of Claim 4 wherein the main uncompressed broadcast subchannel (65) carries the control data for updating and removing old subchannel segments and storing new ones.

According to claim 6, the claim 6 describes the system of claim 1 wherein the separate uncompressed broadcast ancillary television signal contains short television signal segments related to the main uncompressed broadcast signals and the cache (69 in Fig. 6) stores these segments and the main uncompressed broadcast signals and contains control data providing means for removing and storing the segments and the receiver system includes means responsive to the control data for storing the segments and removing the short segments from the cache memory.

According to claim 7, the claim describes the system of Claim 1 wherein the uncompressed broadcast ancillary signals include ancillary and command and control signals.

According to claim 10, the claim describes the system of Claim 1 wherein the main uncompressed broadcast signals (source #1 in Fig. 4) and ancillary uncompressed

broadcast signals (source #2 in Fig. 4) are different parts of a high definition uncompressed broadcast television signal. See Figs. 4 and 5.

According to claim 11, the claim describes the system of Claim 10 including means for switching (HDTV Band/ 2 STD TV in Fig. 4) between high definition uncompressed broadcast television channel and one standard uncompressed broadcast television channel and an uncompressed broadcast ancillary channel.

According to claim 12, the claim describes the system of Claim 11 including means for generating an icon on a television receiver display indicating the presence of the stored uncompressed broadcast ancillary signals and means at the television receiver for accessing the store signal in the cache memory using the icon.

ISSUES

ISSUE 1

Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

ISSUE 2

Claims 1, 4, 6-11 are rejected under 35 U.S.C. 102 (e) as being anticipated by Rosengren et al., U.S. Patent No. 6,041,068 hereinafter Rosengren.

ISSUE 3

Claims 2 and 12 are rejected under 35 U.S.C. 102(a) as being unpatentable over Rosengren in view of Yuen et al U.S. Patent No. 6,452,640; hereinafter Yuen.

ISSUE 4

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosengren in view of Dougherty et al. U.S. Patent No. 5,737,025; hereinafter Dougherty.

ISSUE 5

Claim 5 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Rosengren.

GROUPING OF CLAIMS

These claims do not stand or fall together for the reasons presented in the Argument.

ARGUMENT

ISSUE 1

Claims 1 is rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The examiner has recited text starting from the bottom of page 3 stating that “When the main channels are sent under data compression such as MPG1 and MPG2, they do not require isolation.” This embodiment is excluded from coverage by the claim language. This section of the text references an embodiment that is no longer covered by the current claims. Applicants are presently claiming a system where there is no such compression where uncompressed broadcast ancillary signals are sent and received. Applicant specifically makes reference in the description above of a television video show segment on page 2, line 18 and in one embodiment (Fig. 1) is sent during the vertical blanking interval. A television video show segment is an uncompressed signal. On page 3, starting with line 25, the specification describes the embodiment of Fig. 2. It discusses the

ancillary data is modulated to a digital sideband carrier. It mentions the need for sideband isolation between the channels. The quoted statement about data compression describes one way of providing isolation with one embodiment only but the text describes other methods using sideband. Further the specification describes, on page 4 beginning on line 20 and illustrated in Fig. 4, splitting one high definition television channel into two channels (source #1 and source #2). As discussed the transmitter transmits either the high definition channel frequency band or two standard television frequency bands. As further illustrated in Fig. 5 and on page 5 lines 13-19, the specification discusses and shows how a standard resolution digital broadcast for television is 188 Bytes and fits in the bandwidth of half the high resolution television bandwidth. On page 5 beginning on line 20 another embodiment is shown wherein the channels are time multiplexed. Clearly, uncompressed system is taught in the specification and the specification complies with the written description.

ISSUE 2

Claims 1, 4, 6-11 are rejected under 35 U.S.C. 102 (e) as being anticipated by Rosengren et al., U.S. Patent No. 6,041,068 hereinafter Rosengren.

In the background of applicant's invention, applicant discusses that television broadcasting includes extensive editing of program material, particularly news broadcasting to fit the programming time constraints. It stated that it was highly desirable to enable the viewer to see this material. Video On Demand (VOD) system require significant dedicated amounts of television and other media content to send the selected segments. Further broadcasters are faced with the high cost of installing High Definition Television Broadcast equipment with an unknown and so far limited number of

customers to make it worth while to broadcast high definition television. It is therefore desirable to provide other ways of attracting more viewers. Applicant's claimed invention provides a solution to these problems by broadcasting uncompressed broadcast television signals and separate ancillary uncompressed broadcast television signals with separate television show segment related to the main television signals. This is not taught by the Rosengren reference. Further there is no teaching of taking advantage of the capacity of the high definition television equipment to broadcast simultaneously two uncompressed broadcast television signals to give the user the ability to receive and utilize both simultaneously. This is not taught by the Rosengren reference or the other references.

Claim 1 has been amended to emphasize the patentable features of the present invention.

Applicant's claim 1, as amended, calls for: "a television broadcast transmitter including means for generating and transmitting main uncompressed broadcast television signals and separate ancillary uncompressed broadcast television signals with separate television show segment related to said main television signals; a television receiver system for receiving said main television signals and for receiving and storing in a cache memory the uncompressed broadcast ancillary television signal including the separate television show segment; and selective means at the television receiver for providing either the uncompressed broadcast main television signals or the uncompressed broadcast ancillary television signals with the separate television show segment to a display of said television receiver."

This system is not taught in the Rosengren reference. The Rosengren reference discloses a method and arrangement for deriving an ancillary signal from a compressed digital video signal (e.g. MPEG). The DC coefficients of autonomously encoded pictures (I-pictures) are selected from the compressed signal. The ancillary signal thus obtained can be used for display in a picture-in picture television receiver. The ancillary signal is not a full uncompressed broadcast television signal as applicant teaches. It does not send both a main uncompressed broadcast television signal and an uncompressed broadcast ancillary television signal. The receiver does not receive both a main uncompressed broadcast signal and an uncompressed broadcast ancillary television signal. The Rosengren receiver system does not have selective means at the television receiver for providing either the uncompressed broadcast main television signals or the uncompressed broadcast ancillary television signals with the separate television show segment to a display of said television receiver. The Rosengren only starts with a compressed digital video signal. Claim 1, as amended, is therefore deemed allowable.

Claims 4, 6-7, and 10-12 dependent on Claim 1 are deemed allowable for at least the same reasons as Claim 1.

Claim 4, as amended, further calls for said television signals are transmitted over a digital television channel subdivided into several subchannels of multiplexed signals and wherein one of said subchannels contains said main uncompressed broadcast television signals and the other subchannels provide ancillary uncompressed broadcast signals.

Claim 6, as amended, further calls for said separate uncompressed broadcast ancillary television signal contains short television signal segments related to the main uncompressed broadcast signals and said cache stores said segments and said main

uncompressed broadcast signals and contains control data providing means for removing and storing said segments and said receiver system includes means responsive to said control data for storing said segments and removing said short segments from said cache memory.

Claim 7 further calls for said uncompressed broadcast ancillary signals include ancillary and command and control signals.

Claim 10 further calls for said main uncompressed broadcast signals and ancillary uncompressed broadcast signals are different parts of a high definition uncompressed broadcast television signal. Nowhere is this very useful configuration taught or suggested in the Rosengren reference or the other references. There is no teaching of alternatively sending two standard TV broadcasts over a high definition network. This is a solution to a long felt problem as discussed in the background.

Claim 11 further calls for means for switching between high definition uncompressed broadcast television channel and one standard uncompressed broadcast television channel and an uncompressed broadcast ancillary channel. Nowhere is this very useful configuration taught or suggested in the references.

Claim 12 is dependent on Claim 11 and is therefore deemed allowable for at least the same reasons as Claim 11.

ISSUE 3

Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosengren in view of Yuen et al U.S. Patent No. 6,452,640; hereinafter Yuen. Claim 2 is dependent on Claim 1 and therefore calls for the means for generating and transmitting main uncompressed broadcast television signals and separate ancillary uncompressed broadcast television signals with separate television show segment related to said main

television signals; the receiver system for receiving said main television signals and for receiving and storing in a cache memory the uncompressed broadcast ancillary television signal including the separate television show segment; and the selective means at the television receiver for providing either the uncompressed broadcast main television signals or the uncompressed broadcast ancillary television signals with the separate television show segment to a display of said television receiver. This is not taught in the Rosengren reference as discussed previously. Claim 2 further calls for "means for generating an icon on a television receiver display indicating the presence of the stored uncompressed broadcast ancillary signals and." This is not taught in Rosengren reference. The Yuen reference does not teach or suggest an icon indicating the presence of a stored uncompressed broadcast ancillary signal. The Yuen reference describes a sound bite augmentation to a TV guide listing. It does not in any way teach an icon to indicate the presence of an uncompressed broadcast ancillary signal. It does not indicate the presence of any separate uncompressed broadcast television show. Neither reference teaches this. Further there is no suggestion in either Rosengren or Yuen that teaches means at the television receiver for accessing stored uncompressed broadcast signal in said cache memory using an icon. There is no suggestion in either reference of accessing any ancillary television signal using an icon.

Furthermore, in regard to combining the cited prior art, reference is made to In re Fritch, 23 USPQ2d 1780 and particularly the portion thereof at page 1783 under "Prima Facie Obviousness" where the Court stated:

"In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art.

'[The Examiner] can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.' The patent applicant may then attack the Examiner's prima facie determination as improperly made out, or the applicant may present objective evidence tending to support a conclusion of nonobviousness."

and later stated:

"Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so.' Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious 'modification' of the prior art. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification."

There is no suggestion in the references to suggest the desirability of the modification.

Claim 2 is therefore deemed allowable over the cited references.

Claim 12 is further deemed allowable for at least the same reasons as claim 2.

ISSUE 4

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosengren in view of Dougherty et al. U.S. Patent No. 5,737,025; hereinafter Dougherty.

The Dougherty reference discloses ancillary code that is added to a composite video signal in its active video portion. The Dougherty reference is a system for transmitting data in the same the same communication channel as a composite video signal. The composite video signal is transmitted in a frequency band and has a horizontal sync period. A selecting means selects a carrier having a carrier frequency within the frequency band at the beginning of each stepping period. Each stepping period has a duration equal to or integer multiple of the horizontal sync period. A modulating means modulates the data onto the selected carrier to produce a modulated data signal. A combining means combines the modulated data signal with the composite video signal. Fig. 1 illustrates a multi-level encoded signal monitoring system with a plurality of encoders 12-1, 12-2,...,12-N. Each encoder 12 may be located at a corresponding stage of distribution of a program signal and are designated as distribution point 1, distribution point 2,...,distribution point N. Each ancillary signal encoder adds a corresponding ancillary code into a corresponding segment of a unique multi-level identification information message of a composite video signal provided by a program source 14. A plurality of decoders 16 and 18 is associated with selected points of distribution of the composite video signal to decode the ancillary signal codes. The ancillary information is the codes illustrated in Figure 2. As stated on Col. 7, lines 47-51, "This ancillary code may be the data, such as the network ID or the local TV station ID, contained in any of the segments shown in Fig. 2 depending upon the level of distribution at which the encoder is located. The system of the reference provides an in-home television audience measurement system that has non-intrusive detection and decoding of both the ancillary code, which is present in the television signal at the time the television signal is received

by the in-home audience measurement system and which is transmitted with a television signal in a co-channel mode, and the in-home code, which is inserted into the RF television signal by the in-home television measurement system.

This is completely different from that claimed by applicant and from that presented by the examiner in the rejection. Applicant calls for “separate uncompressed broadcast ancillary television signals related to said main uncompressed broadcast television signals.” There is only a main television signal in the Dougherty reference. The ancillary signal is a data code and certainly not other uncompressed broadcast television signals as claimed by applicant. The Dougherty reference is a code such as a local data code. Claim 1 further call for, “a television receiver system for receiving said main uncompressed broadcast television signals and for storing in a cache memory the ancillary uncompressed broadcast television signals.” There is no storing in a cache memory any ancillary uncompressed broadcast television signals in the Dougherty reference or the Rosengren reference. Still further, there is no “selective means at the television receiver for providing either the main uncompressed broadcast television signals or the ancillary uncompressed television signals to display of said television receiver.”

Clearly, the Dougherty reference and Rosengren do not teach the elements of claim 3 and is not therefore obvious in view thereof.

ISSUE 5


Claim 5 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Rosengren. Claim 5 calls for “The system of Claim 4 wherein said main uncompressed broadcast subchannel carries the control data for updating and removing old subchannel segments

and storing new ones. Claim 5 dependent on claim 4 is deemed allowable for at least the same reasons as claim 4. The claim further calls for the main uncompressed broadcast subchannel carries the control data for updating and removing old subchannel segments and storing new ones. The examiner has not presented any references to teach this. The examiner states that the ATVEF standard stipulates to send command/control signals using the VBI interval to manage the cache is known. I don't see that any such cache is mentioned. I don't see where the ATVEF teaches or suggests updating and removing old uncompressed subchannel segments and storing new ones. There is nothing to even teach updating and removing uncompressed subchannel signals or the concept of storing uncompressed television signals and storing segments and updating segments as taught and claimed herein.

CONCLUSION

In view of the above, the examiners rejection of Claims 1-12 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement should be reversed. In view of the above, the examiner's rejection of Claims 1, 4, 6-11 under 35 U.S.C. 102 (e) as being anticipated by Rosengren et al., U.S. Patent No. 6,041,068 hereinafter Rosengren should be reversed. Nowhere is there taught or suggested the Claim 10 teaching that the main uncompressed broadcast signals and ancillary uncompressed broadcast signals be different parts of a high definition uncompressed broadcast television signal. Nowhere is this very useful configuration taught or suggested in the references. There is no teaching of this anywhere. This is a solution to a long felt problem as discussed in the background. Further nowhere is there taught as claimed in Claim 11 the teaching of switching (HDTV Band/ 2 STD TV in

Fig. 4) between high definition uncompressed broadcast television channel and one standard uncompressed broadcast television channel and an uncompressed broadcast ancillary channel. In view of the above, the examiner's rejection of Claims 2 and 12 under 35 U.S.C. 103(a) as being unpatentable over Rosengren in view of Yuen et al U.S. Patent No. 6,452,640 should be reversed. In view of the above the rejection of Claim 3 under 35 U.S.C. 103(a) as being unpatentable over Rosengren in view of Dougherty et al. U.S. Patent No. 5,737,025; hereinafter Dougherty should be reversed. In view of the above the rejection of Claim 5 under 35 U.S.C. 103 (a) as being unpatentable over Rosengren should be reversed.

Respectfully submitted,

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APPENDIX

1. (previously amended) A system for nonlinear viewing of television segments comprising:

a television broadcast transmitter including means for generating and transmitting main uncompressed broadcast television signals and separate ancillary uncompressed broadcast television signals with separate television show segment related to said main television signals;

a television receiver system for receiving said main television signals and for receiving and storing in a cache memory the uncompressed broadcast ancillary television signal including the separate television show segment; and

selective means at the television receiver for providing either the uncompressed broadcast main television signals or the uncompressed broadcast ancillary television signals with the separate television show segment to a display of said television receiver.
2. (previously amended) The system of Claim 1 including means for generating an icon on a television receiver display indicating the presence of the stored uncompressed broadcast ancillary signals and means at the television receiver for accessing said store signal in said cache memory using said icon.
3. (previously amended) The system of Claim 1 wherein said uncompressed broadcast ancillary signal is broadcasted in the vertical blanking interval of the main uncompressed broadcast signal and said receiver receives the uncompressed broadcast ancillary signal during the vertical blanking interval.

4. (previously amended): The system of claim 1 wherein said television signals are transmitted over a digital television channel subdivided into several subchannels of multiplexed signals and wherein one of said subchannels contains said main uncompressed broadcast television signals and the other subchannels provide ancillary uncompressed broadcast signals.

5. (previously amended) The system of Claim 4 wherein said main uncompressed broadcast subchannel carries the control data for updating and removing old subchannel segments and storing new ones.

6. (previously amended) The system of Claim 1 wherein said separate uncompressed broadcast ancillary television signal contains short television signal segments related to the main uncompressed broadcast signals and said cache stores said segments and said main uncompressed broadcast signals and contains control data providing means for removing and storing said segments and said receiver system includes means responsive to said control data for storing said segments and removing said short segments from said cache memory.

7. (previously amended): The system of Claim 1 wherein said uncompressed broadcast ancillary signals include ancillary and command and control signals.

8. (canceled):

9. (canceled):

10. (previously amended) The system of Claim 1 wherein said main uncompressed broadcast signals and ancillary uncompressed broadcast signals are different parts of a high definition uncompressed broadcast television signal.

11. (previously amended): The system of Claim 10 including means for switching between high definition uncompressed broadcast television channel and one standard uncompressed broadcast television channel and an uncompressed broadcast ancillary channel.

12. (previously added): The system of Claim 11 including means for generating an icon on a television receiver display indicating the presence of the stored uncompressed broadcast ancillary signals and means at the television receiver for accessing said store signal in said cache memory using said icon.